

An Essay

on the

Pathology of the Lymphatics

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The lymphatic vessels, (or absorbents as they are sometimes styled) receive their name from a greek word signifying water, from the watery or limpid fluid which they convey.

They are very minute and delicate, remarkable for their uniformity of size, a knotted appearance, and their



frequent division into  
pairs

They have a structure according to Kolliker, similar to that of the veins, viz., an external, middle, and internal coat, or tunica, within which the circulation is performed by the aid of numerous valves, (which give to the vessels their peculiar knotted appearance,) similar to the circulation in the venous system.

Connected with the circulatory system of the lymphatic vessels, are



numerous small oval or rounded bodies, of a pale red color, called lymphatic or conglobate glands, which are composed of a ramification of minute lymphatic and capillary blood vessels held together, and enclosed by a comparatively dense mass of areola tissue.

Owing to their extreme minuteness (with the exception perhaps of the thoracic duct) the study of the Pathology of the lymphatic system is extremely difficult and unsatisfactory, especially



of the superficial vessels,  
With these few introductory  
remarks we will proceed  
directly to the consideration  
of the special Pathology  
of the lymphatic system,  
which will be considered  
under the several heads of,  
Inflammation, Gangrene,  
Hypertrophy, Dilatation,  
Tubercle, Carcinoma, Melanosis, &c,

### First Inflammation

Like other inflammation,  
inflammation of the lym-  
phatics is characterized  
by pain, redness, heat, and  
swelling along the course



of the inflamed vessel,  
The color of the coats of  
the vessel in the simple,  
and commencement of the  
more serious forms, is of  
a light reddish tint

Resolution is the most  
frequent and favorable  
form of termination: but  
sometimes the color changes  
to a violet or more com-  
monly to a deep red, or  
purple color: and as the  
inflammation advances, the  
proper nutrient vessels  
become engorged with blood,  
the surrounding areola  
tissue becomes involved,



serum is exuded, and we have the formation of an abscess.

Pus is also sometimes found in a vessel as a foreign substance, by mere absorption from an abscess in the immediate vicinity.

Acute inflammation in the glands is of very common occurrence. In these cases the gland enlarges, sometimes as large as a large orange, and very often terminates in suppuration; as for instance in the inguinal and axillary regions.



## Second Gangrene

Acute inflammation  
also sometimes terminates  
in gangrene, when immense  
sloughs are formed, as in  
cases of syphilitic buboes,  
occurring in debauched and  
worn-out habits

## Third Hypertrophy

Hypertrophy of the Lym-  
phatic glands is sometimes  
the result of chronic in-  
flammation: sometimes  
the primary cause is  
seated in their own tissue,  
and sometimes it may  
arise from an irritation



communicated to them  
from the surrounding  
tissues, viz., in the mesen-  
teric glands from an irita-  
tion in the bowels, in the  
axillary glands, from an  
irritation in the breast,  
in the inguinal glands,  
from an irritation in  
the penis, &c.

In these conditions  
their color is various  
as white, grey, or of a  
yellowish or brownish  
tint, sometimes of a dense  
or gristly hardness, grating  
sensibly under the knife.  
Sometimes in this



condition they so obstruct  
the process of nutrition  
as to cause emaciation  
and death; and Dr.  
William Hunter mentions  
an instance in which  
the internal iliac  
glands were so enlarged,  
as to cause death by  
preventing the descent  
of the child's head  
during the process of  
parturition

#### Fourth Dilatation

A remarkable  
dilatation of the lym-  
phatic vessels is sometimes



observed, giving them a varicose or tortuous arrangement, and the resulting tumors when examined present a spongy appearance, the size of all the vessels being enlarged, not unlike the varicose arrangement of the venous system.

#### Fifth Tubercle

Of all parts of the human system, few are, perhaps, more liable to the deposition of tuberculous matter, than the lymphatic glands



It is deposited in the gland substance in yellowish masses and liable to all the changes that tubercular deposition elsewhere undergoes, and in one instance in my dissections I observed that the glands of the axilla were converted completely into a calcareous substance tubercular matter having been deposited cretification ensued

Children are particularly prone to a glandular tubercular deposit

Dr Lombard found



that of one hundred  
post mortem examinations  
of tuberculous children,  
the several glands were  
affected as follows, viz.  
bronchial, eighty seven,  
mesenteric, thirty one,  
cervical, seven, and in-  
guinal, three,

Sixth Carcinoma  
There is probably  
no part of the human  
economy so liable to  
the deposition of sec-  
ondary cancerous deposits,  
as that of the lymph-  
atic glands, The reason



of this is obvious. In cases of cancerous habits, the cancer blastema may be absorbed from the affected organ, transferred by the lymphatics to a gland in the vicinity, there becoming entangled in the minute ramifications of the vessels, thus as it were becoming the exciting cause of a fresh deposition of cancerous matter in the new location; and in this way I think we may account for some forms of cancerous



cachexia especially in the  
more advanced stages

### Seventh Melanosis

Melanosis is some-  
times an affection with  
which the glandular  
system is often com-  
plicated, more especially  
those which are in close  
proximity to the respi-  
ratory apparatus

It is not probably  
a morbid process of  
itself, but more properly  
speaking, a proof of  
the depuratory powers



of the glands by which  
they assist in the  
purification of the blood

There are also other  
pathological conditions  
of the lymphatic system,  
but as they are of minor  
importance, and as time  
and space will not  
permit me to enlarge,  
I will close, hoping these  
few, brief notices, will  
suffice the object for  
which they were written